MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

WinDoor, Inc.
7500 Amsterdam Drive
Orlando, FL 32832

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "9000 Deep 180° Thermally Broken" Clipped Aluminum Tube Mullion - L.M.I.

APPROVAL DOCUMENT: Drawing No. **08-00923**, titled "Series 9000 Deep 180° Thermally Broken Aluminum Mullion – L.M.I.", sheets 1 through 6 of 6, dated 02/26/10, with revision B dated 08/30/13, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**

MIAMI-DADE COUNTY APPROVED

9/25/13

WinDoor, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **08-00923**, titled "Series 9000 Deep 180° Thermally Broken Aluminum Mullion - L.M.I.", sheets 1 through 6 of 6, dated 02/26/10, with revision B dated 08/30/13, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E.

B. TESTS

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
   2) Large Missile Impact Test per FBC, TAS 201-94
   3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
   along with marked-up drawings and installation diagram of a 180° thermally broken aluminum mullion, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3884-1**, dated 05/30/13, signed and sealed by Gerard J. Ferrara, P.E.

C. CALCULATIONS:

1. Anchor verification calculations and structural analysis, complying with **FBC-2010**, dated 03/05/10, 08/13/13 and 09/03/13, prepared, signed and sealed by Luis R. Lomas, P.E.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. Material Data Sheet for "insulating profiles made of PA 66 GF25 – dry impact resistant, to fit into Technoform I-Strut™ Aluminum Standard Reglet.
2. Test report No.**ATI–61261.01–106-18**, prepared by Architectural Testing, Inc., dated 12/08/05, with revision date 01/04/06, issued to **Technoform**, for their **I-Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, per **ASTM D635–03** "Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position" and ASTM **D2843–99** "Standard Test Method for the Density of Smoke from the Burning Decomposition of Plastics", signed and sealed by Joseph A. Reed, P.E.
3. Test report No. **ETC–07–1043–19094.0**, prepared by ETC Laboratories, dated 02/04/08, issued to Technoform Bautec NA, Inc., for their **I-Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, per **ASTM D638–03** *"Standard Test Methods for Tensile Properties of Plastics"*, for exposed & unexposed sample per Xenon Arc after 4500 Hours, signed and sealed by Joseph Labora Doldan, P.E.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 11-1011.02
Expiration Date: October 03, 2018
Approval Date: October 03, 2013

E. MATERIAL CERTIFICATIONS (CONTINUED)

4. Test report No. **ETC–08–1043–20974.0**, prepared by ETC Laboratories, dated 07/01/08, issued to Technoform, for their **I-Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, per **ASTM D1929–96** *"Standard Test Method for Ignition Properties of Plastics"*, signed and sealed by Joseph Doldan, P.E.

F. STATEMENTS

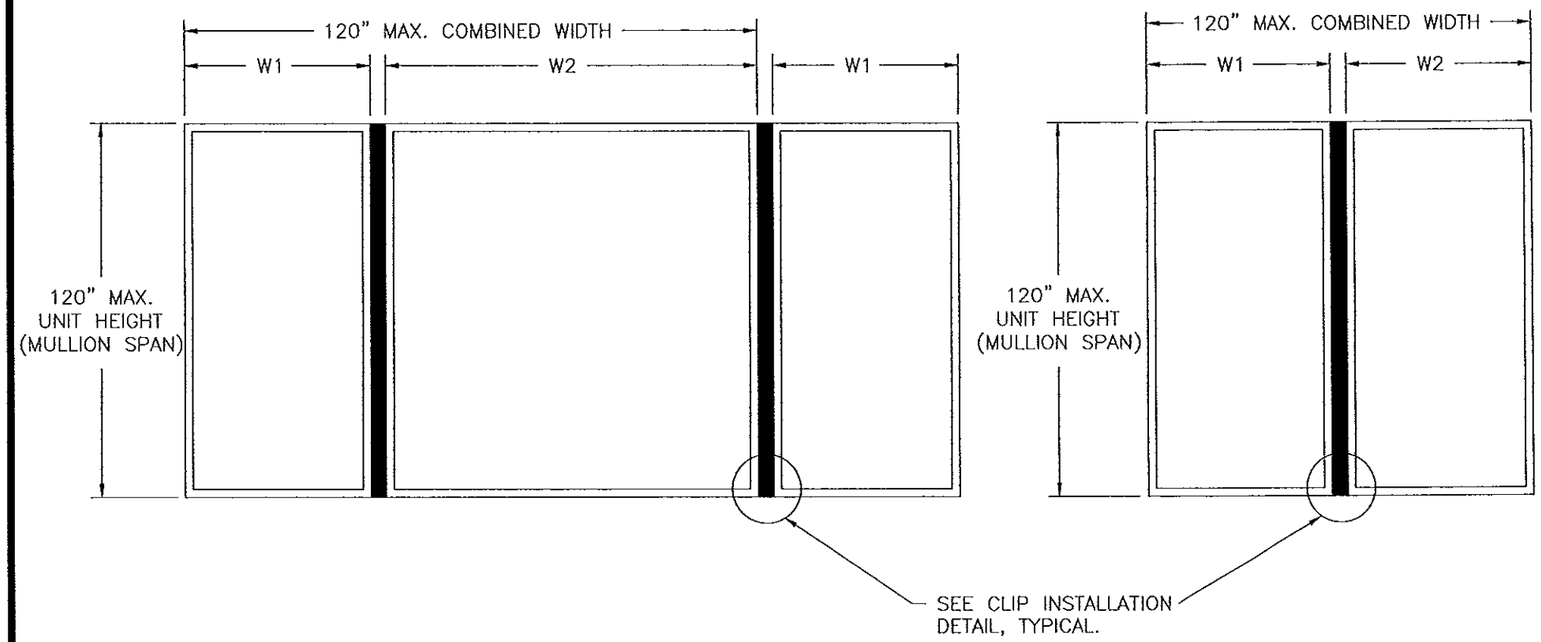
1. Statement letter of conformance, complying with the **FBC-2010** and of no financial interest, dated August 14, 2013, signed and sealed by Luis R. Lomas, P.E.

G. OTHERS

1. None.

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 11-1011.02
Expiration Date: October 03, 2018
Approval Date: October 03, 2013



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW TESTING	08/15/13	R.L
B	REVISED BOM AND CLIP	08/30/13	R.L

NOTES:

1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING HVHZ.
2) WOOD FRAMING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3) ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
4) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
5) DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
6) SINGLE WINDOWS OR DOORS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. SINGLE WINDOWS OR DOORS MUST BE MANUFACTURED BY WinDoor INC.
7) DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW OR DOOR UNIT.
8) UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS SINGLE UNIT WIDTH AND HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
9) MULLION VERTICAL INSTALLATION IS SHOWN, MULLION MAY BE USED IN HORIZONTAL APPLICATIONS AS LONG AS DIMENSIONS INDICATED HEREIN ARE NOT EXCEEDED AND MULLION IS ANCHORED ACCORDING TO THIS DOCUMENT.

DESIGN PRESSURE TABLE INSTRUCTIONS:

1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2) DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
3) LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2.
MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

Design pressure rating (psf)

Mullion span (in)	Tributary width (in)						
	24.00	***30.00***	***36.00***	***42.00***	***48.00***	***54.00***	***60.00***
24.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
30.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
36.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
42.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
48.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
54.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
60.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
66.00	200.0	200.0	200.0	200.0	200.0	200.0	200.0
72.00	200.0	200.0	200.0	200.0	200.0	200.0	198.9
78.00	200.0	200.0	200.0	200.0	186.3	172.2	162.2
84.00	200.0	200.0	199.4	175.0	157.5	144.7	135.3
90.00	200.0	200.0	172.2	150.7	135.1	123.5	114.8
96.00	200.0	177.8	150.4	131.2	117.2	106.8	98.9
102.00	194.0	156.9	132.4	115.3	102.8	93.3	86.1
108.00	172.7	139.5	117.6	102.2	90.9	82.3	75.7
114.00	154.7	124.8	105.1	91.2	81.0	73.2	67.2
120.00	139.2	112.4	94.6	82.0	72.7	65.6	60.0

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

SIGNED: 09/03/2013

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	ELEVATIONS, NOTES AND DESIGN PRESSURE CHART
2	BILL OF MATERIALS AND COMPONENTS
3 – 6	INSTALLATION DETAILS

Approved as complying with the Florida Building Code
Date Oct. 3, 2013
NOA# 11-1011.04
Miami Dade Product Control
By Manuel Perez

WinDoor INCORPORATED
7500 AMSTERDAM DRIVE
ORLANDO, FL 32832
Phone: 407.481.8400
Fax: 407.481.0505
www.windoorinc.com

SERIES 9000 DEEP 180° THERMALLY BROKEN ALUMINUM MULLION – LMI
ELEVATIONS, NOTES AND DESIGN PRESSURE CHART

DRAWN:	DWG NO.	REV
R.L.	08–00923	B
SCALE NTS	DATE 02/26/10	SHEET 1 OF 6

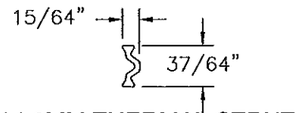
LUIS R. LOMAS
LICENSE
No. 62514
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

BILL OF MATERIALS

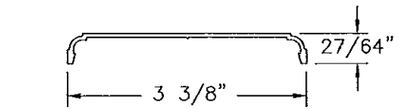
ITEM NO.:	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	9AMU12-WDI	180° MULL ASSY	KEYMARK	ALUMINUM 6063-T6
2	S-45530	180° MULL PUSH BAR	KEYMARK	ALUMINUM 6005-T6
3	S-45625	180° MULL PUSH BAR COVER	KEYMARK	ALUMINUM 6063-T5
4	FS-03854	T CLIP	KEYMARK	ALUMINUM 6105-T5
5		4" x 4" MULL L-CLIP	KEYMARK	ALUMINUM 6105-T5
6	GS-VN-07A	INTERIOR/EXTERIOR VINYL	TEAM PLASTICS	VINYL
7		#10 x 1" PH TEK SCREW		
8		14.6 MM THERMAL I-STRUT	TECHNOFORM	NYLON POLYAMIDE (PA 66 GF25)

REVISIONS

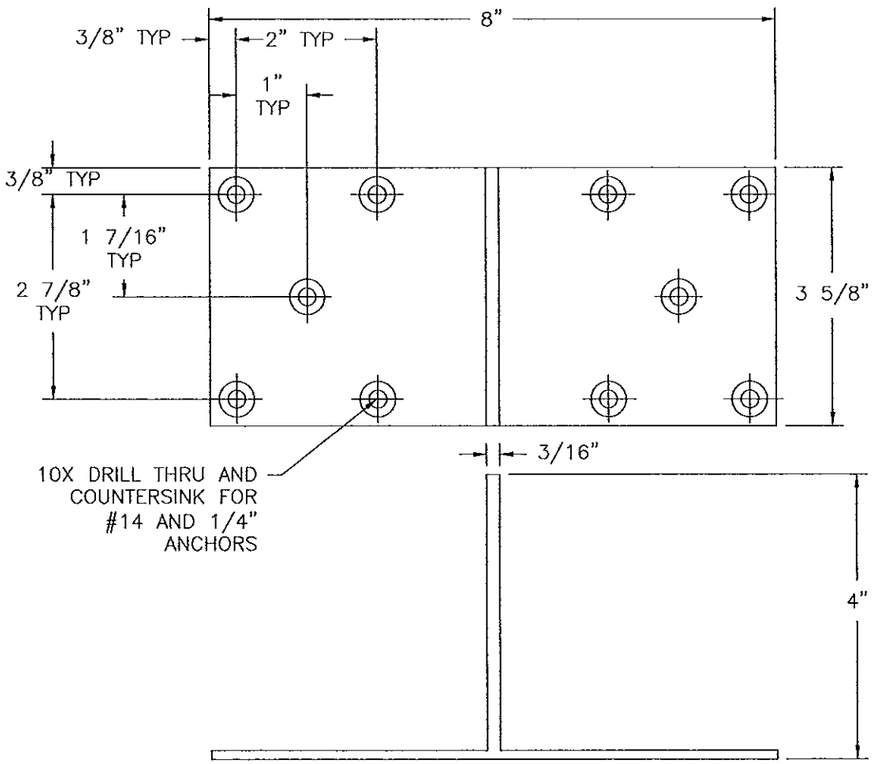
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW TESTING	08/15/13	R.L
B	REVISED BOM AND CLIP	08/30/13	R.L



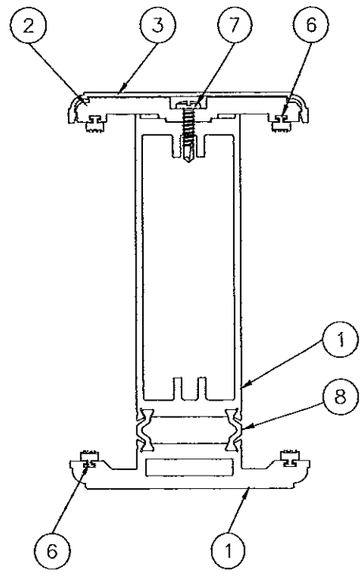
14.6MM THERMAL STRUT
NYLON POLYAMIDE .070" THICK



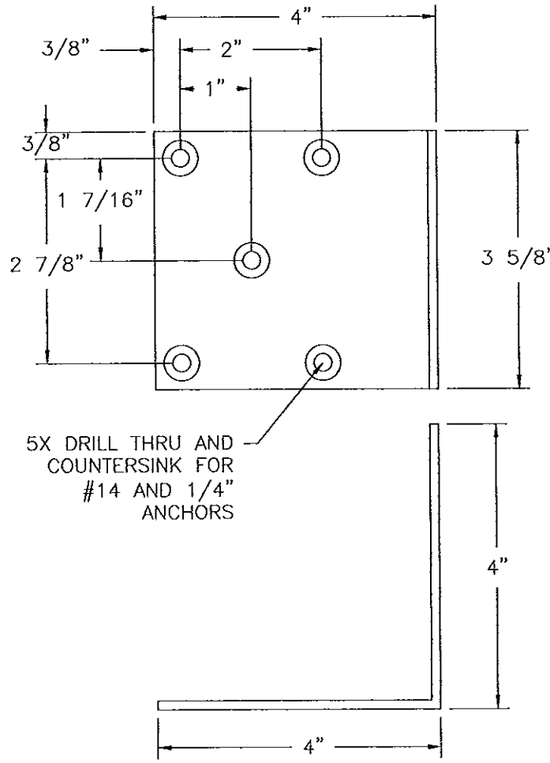
180° MULL PUSH BAR COVER
ALUMINUM 6063-T5 .110" THICK



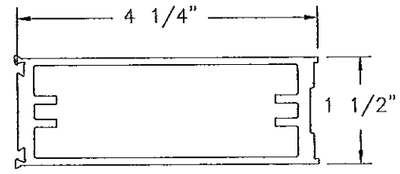
T CLIP
ALUMINUM 6063-T5 .125" THICK



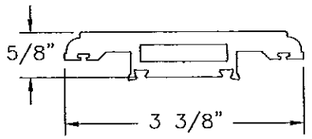
MULLION ASSEMBLY DETAIL
TOTAL MI = 10.006
EFFECTIVE MI = 9.624
(EFFECTIVE MI PER TIR-A8 SOFTWARE)



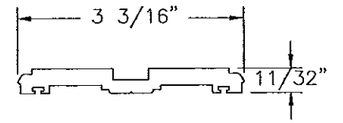
4" x 4" MULL L-CLIP
ALUMINUM 6063-T6 .125" THICK



180° MULL INTERIOR
ALUMINUM 6105-T5 .075" THICK



180° MULL EXTERIOR
ALUMINUM 6105-T5 .180" THICK



180° MULL PUSH BAR
ALUMINUM 6105-T5 .234" THICK

SIGNED: 09/03/2013

Approved as complying with the Florida Building Code
Date Oct. 3 2013
NOA# 11-1011.02
Miami Dade Product Control
By Manuel Perez

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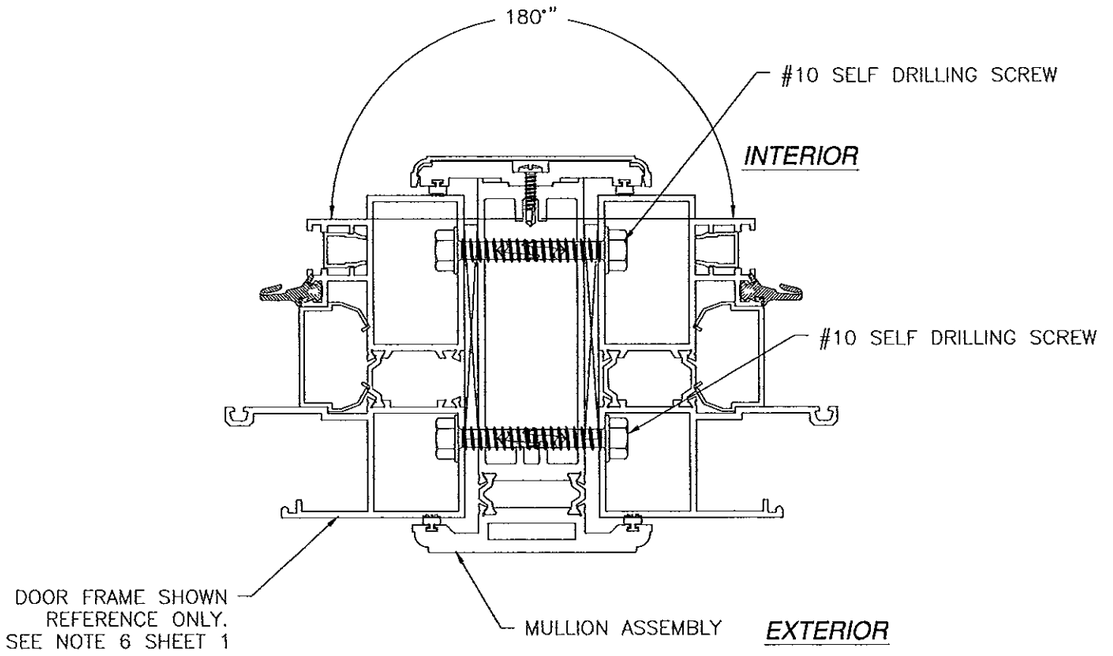
SERIES 9000 DEEP 180° THERMALLY BROKEN
ALUMINUM MULLION – LMI
BILL OF MATERIALS AND COMPONENTS

DRAWN:	DWG NO.	REV
R.L.	08-00923	B
SCALE NTS	DATE 02/26/10	SHEET 2 OF 6

LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW TESTING	08/15/13	R.L.
B	REVISED BOM AND CLIP	08/30/13	R.L.



DOOR/WINDOW TO MULLION INSTALLATION DETAIL

DOOR FRAME SHOWN FOR DETAIL PURPOSES ONLY, MULLION IS NOT LIMITED TO THIS PRODUCT

ANCHORING NOTES:

1) FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 4.
2) FOR ANCHORING INTO CONCRETE USE 1/4" ITW TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 5.
3) FOR ANCHORING INTO 16GA. MINIMUM METAL FRAMING USE #10" SELF DRILLING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3--THREADS MINIMUM BEYOND METAL FRAMING. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 5.
4) FOR ATTACHING WINDOW UNITS TO MULLION USE #10 SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST THE MULLION WALL. LOCATE SCREWS 6" FROM EACH MULLION END AND 24" MAX. O.C. THEREAFTER. STAGGER SCREWS AT EACH WINDOW.
5) FOR WINDOW AND DOOR UNITS ANCHORING SCHEDULE REFER TO WINDOW AND DOOR APPROVED INSTALLATION INSTRUCTIONS.
6) ALL FASTENERS TO BE CORROSION RESISTANT.
7) INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
   A. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
   B. CONCRETE – 2000 PSI MINIMUM
   C. METAL FRAMING -- 16GA. (.063") MINIMUM
8) TO ATTACH MULLION TO CLIP USE (3) #10 x 3/4" TEK SCREWS PER CLIP. SCREWS MUST BE FIELD INSTALLED. HOLES FOR TEK SCREWS ARE NOT PRE-DRILLED BY MANUFACTURER.

SIGNED: 09/03/2013

Approved as complying with the Florida Building Code
Date Oct. 3, 2013
NOA# 11-1011.02
Miami Dade Product Control
By: Manuel Perez

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SERIES 9000 DEEP 180° THERMALLY BROKEN ALUMINUM MULLION – LMI
ASSEMBLED VIEW AND INSTALLATION DETAIL

DRAWN:	DWG NO.	REV
R.L.	08-00923	B
SCALE NTS	DATE 02/26/10	SHEET 3 OF 6

LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

REVISIONS			
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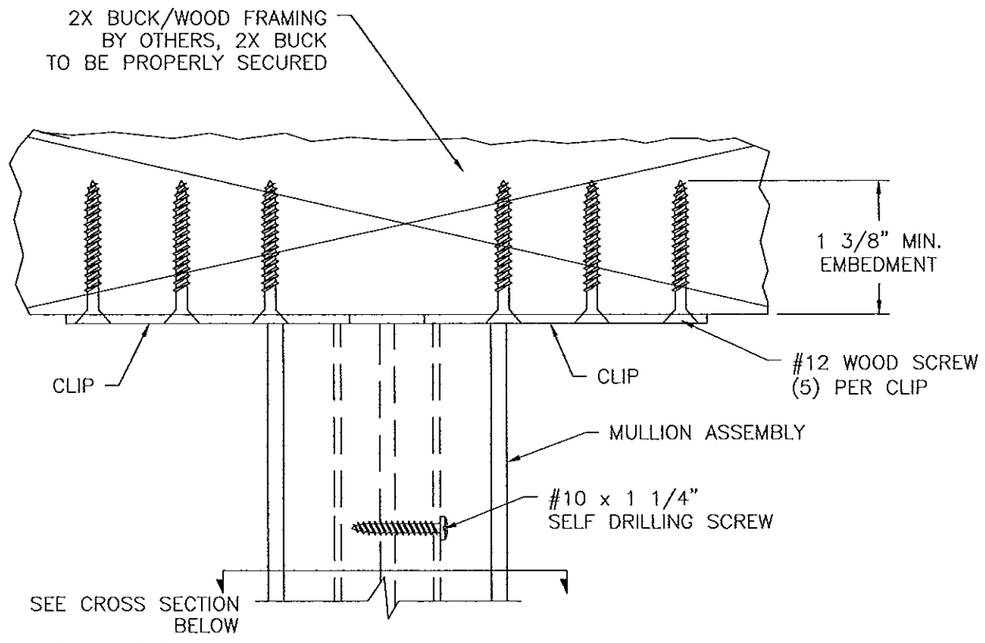
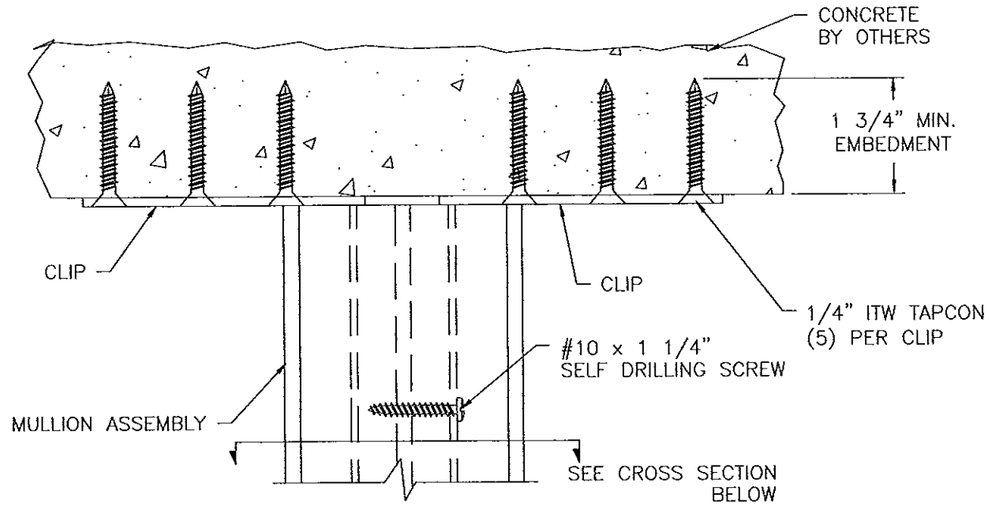


T-CLIP INSTALLATION DETAIL

2X BUCK/WOOD FRAMING, TOP & BOTTOM SIMILAR



T-CLIP INSTALLATION DETAIL

CONCRETE INTALLATION, TOP & BOTTOM SIMILAR

SIGNED: 09/03/2013

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SERIES 9000 DEEP 180° THERMALLY BROKEN ALUMINUM MULLION – LMI
INSTALLATION DETAILS

DRAWN:	DWG NO.	REV
R.L.	08-00923	B
SCALE NTS	DATE 02/26/10	SHEET 4 OF 6

LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

REVISIONS			
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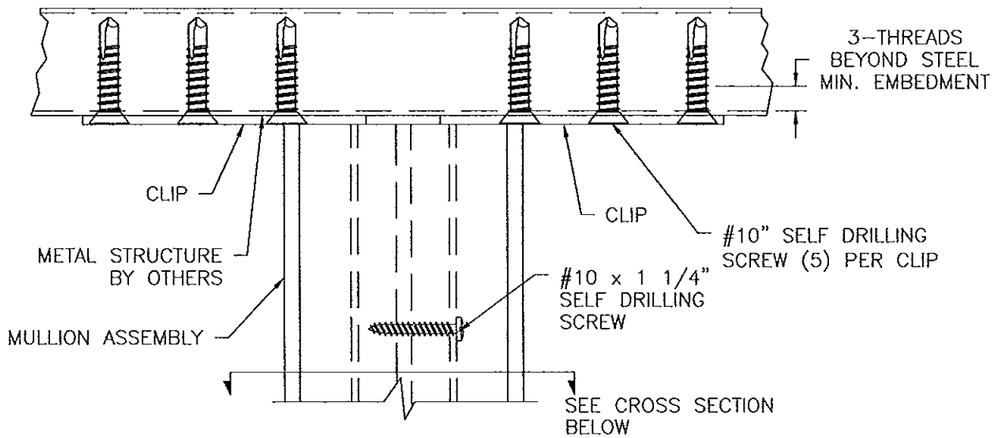
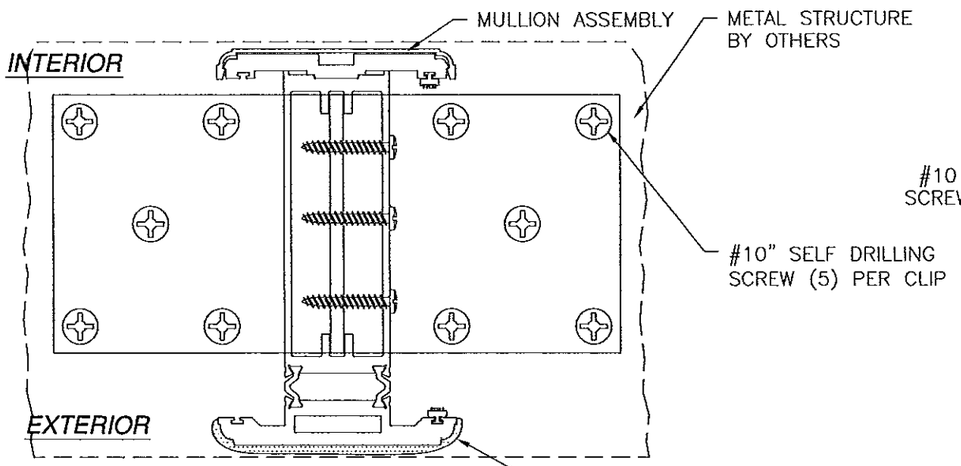
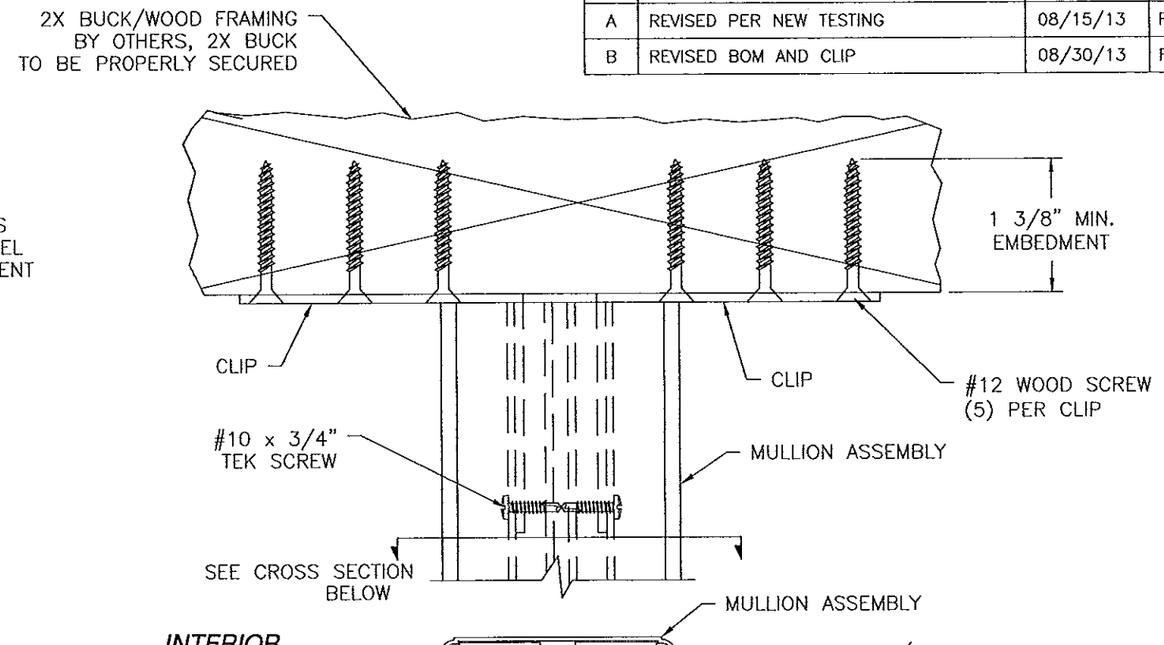
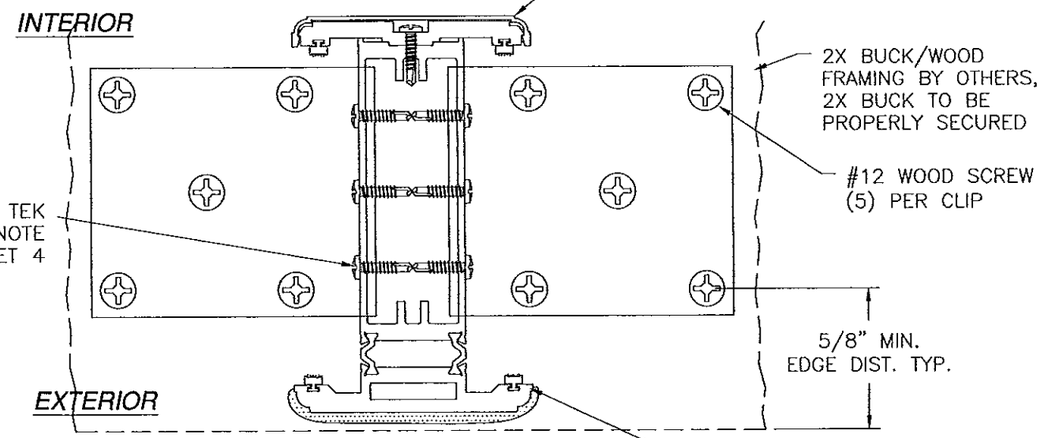




T-CLIP INSTALLATION DETAIL

16GA, MIN. METAL FRAMING, TOP & BOTTOM SIMILAR





OPTIONAL L-CLIP INSTALLATION DETAIL

2X BUCK/WOOD FRAMING, TOP & BOTTOM SIMILAR

SIGNED: 09/03/2013

Approved as complying with the Florida Building Code
Date Oct. 3, 2013
NOA# 11-1011.02
Miami Dade Product Control
By Manuel Perez

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SERIES 9000 DEEP 180° THERMALLY BROKEN ALUMINUM MULLION - LMI INSTALLATION DETAILS

DRAWN:	DWG NO.	REV
R.L.	08-00923	B
SCALE NTS	DATE 02/26/10	SHEET 5 OF 6

LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

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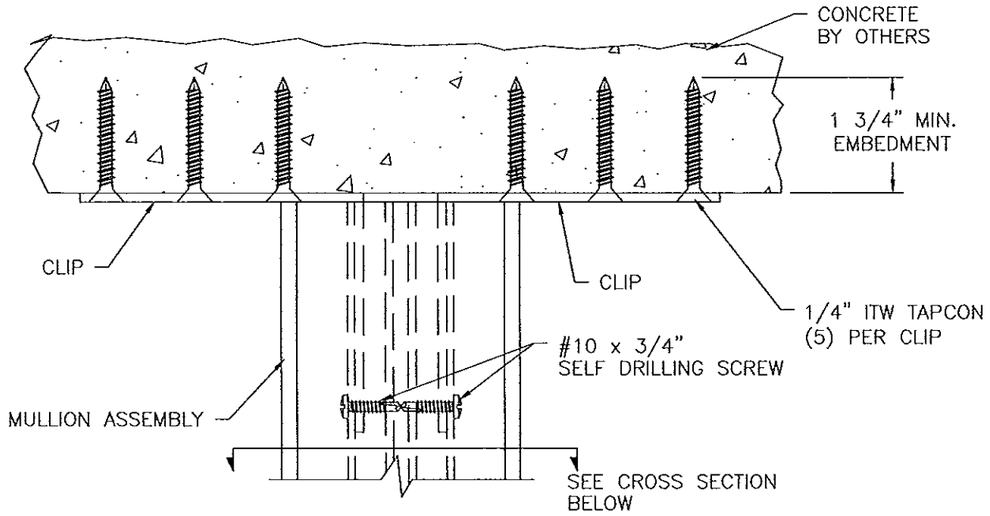
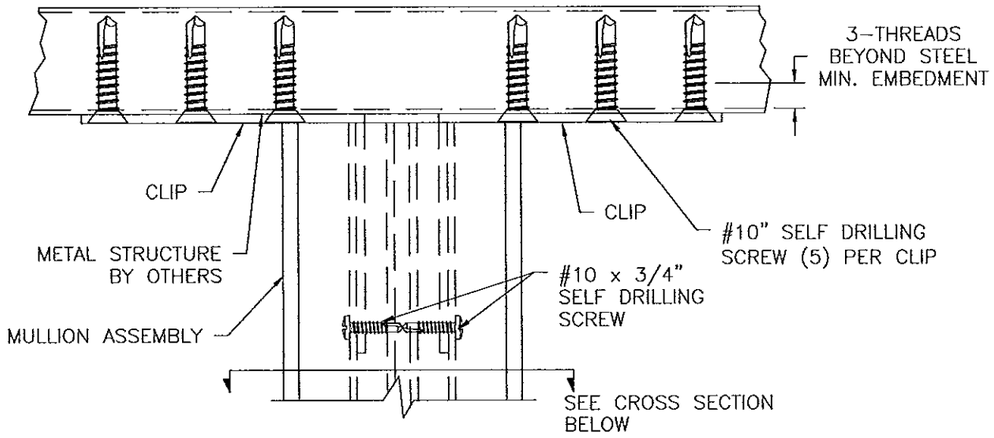
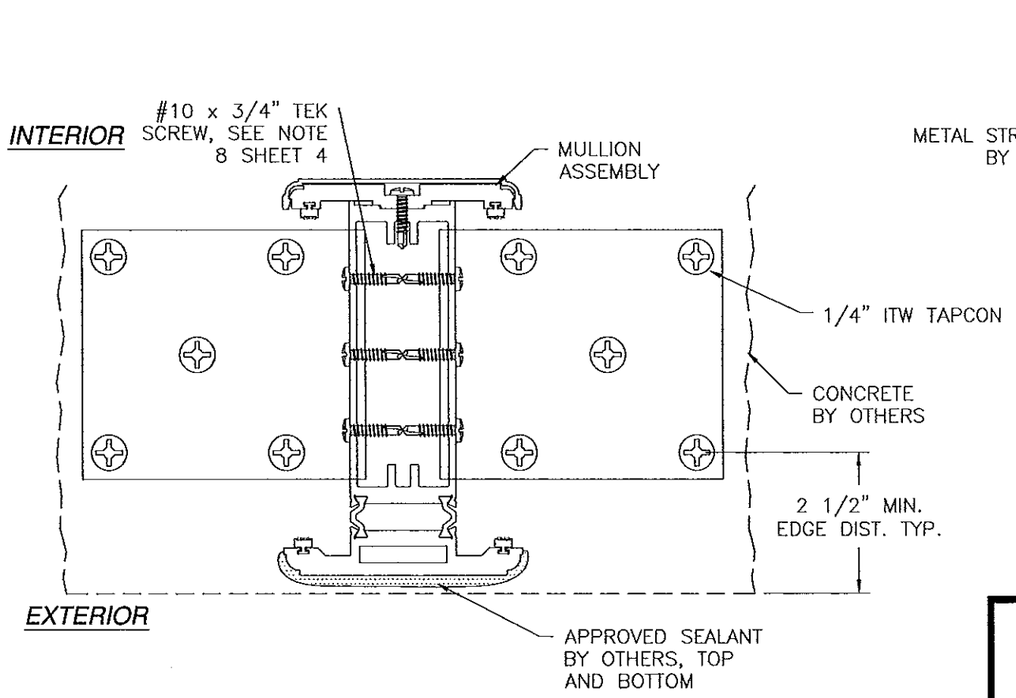
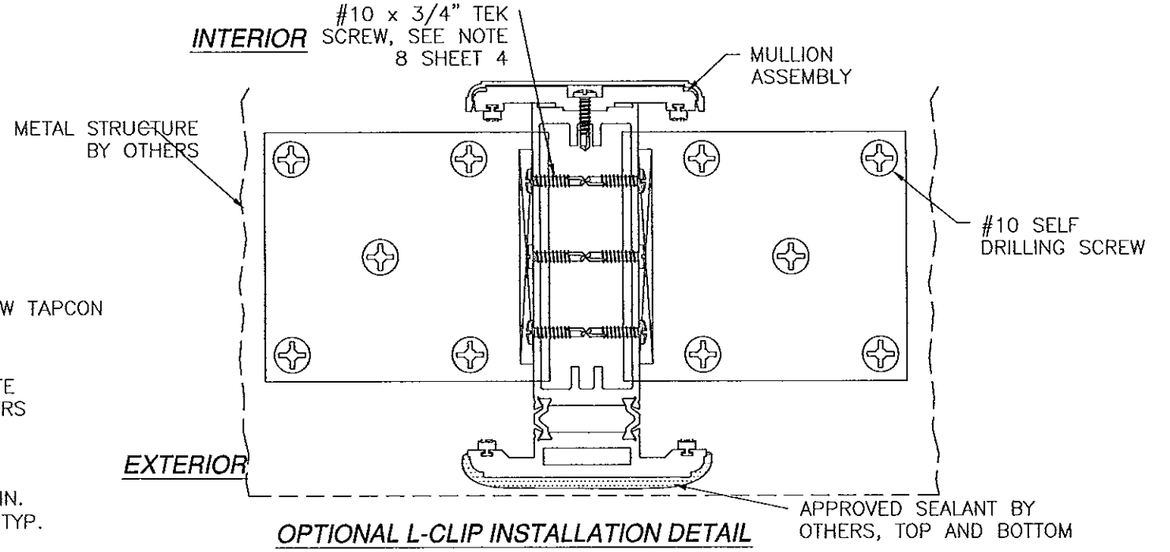
A	REVISED PER NEW TESTING	08/15/13	R.L
B	REVISED BOM AND CLIP	08/30/13	R.L







OPTIONAL L-CLIP INSTALLATION DETAIL
CONCRETE INSTALLATION, TOP & BOTTOM SIMILAR



OPTIONAL L-CLIP INSTALLATION DETAIL
16GA. MIN. METAL FRAMING, TOP & BOTTOM SIMILAR

SIGNED: 09/03/2013

Approved as complying with the Florida Building Code
Date Oct. 3, 2013
NOA# 11-1011.01
Miami Dade Product Control
By Manuel Perez

WinDoor INCORPORATED
7500 AMSTERDAM DRIVE
ORLANDO, FL 32832
Phone: 407.481.8400
Fax: 407.481.0505
www.windoorinc.com

SERIES 9000 DEEP 180° THERMALLY BROKEN ALUMINUM MULLION - LMI
INSTALLATION DETAILS

DRAWN:	DWG NO.	REV
R.L.	08-00923	B
SCALE NTS	DATE 02/26/10	SHEET 6 OF 6

LUIS R. LOMAS
LICENSE
No. 62514
STATE OF FLORIDA
PROFESSIONAL ENGINEER